

REMARKS

Claims 1-14, 21 and 23-25 are pending in this application, all of which stand rejected. Based on the foregoing amendments and following remarks, reconsideration and allowance of this application is respectfully requested.

Claim Rejections-35 U.S.C. §112

Claims 10-14 stand rejected under 35 U.S.C. §112, second paragraph, as being indefinite. In particular, the Examiner states that it is not known whether the phrase “spatially locating the mark, thereby determining the spatial offset value of the mark relative to the reference coordinate value” further limits the step of “locating a datum mark on the sample” of if it is an entirely separate step for locating the datum mark. In response, Applicant has amended claims 10 and 14 to require “relocation” of the datum mark.

Thus, Applicant believes that the Examiner’s indefiniteness rejections of claims 10-14 have been cured, and as such, respectfully requests withdrawal of the §112 rejections of these claims.

Claim Rejections-35 U.S.C. §103

Gibbs

Claims 1-3, 5, and 7-8 stand rejected under 35 U.S.C. §103 as being obvious over U.S. Patent No. 5,000,554 to Gibbs (“Gibbs”). Applicant respectfully traverses this rejection, since Gibbs does not disclose, teach, or suggest the combination of elements required by these claims.

Applicant disagrees that “it would have been obvious to modify Gibb’s teachings so that the location of area of interest is verified if the dimensional error is less than a tolerance value, in order to allow the area of interest to be detected on a later occasion at approximately the same location as when it was originally detected,” as required by independent claim 1. Based on the Examiner’s

statement that at the bottom of page 3 of the Office Action, the location of the area of interest is already verified when the microscopic object appears in the microscope's visual field at approximately the same location as when it was originally detected. As such, there is no need to verify the location of the area of interest in a different manner, and thus, no suggestion to modify the Gibbs device to provide such additional verification. In fact, there is no suggestion in Gibbs that the location of an area of interest requires any automated verification, since Gibbs assumes that the area of interest will be subsequently presented in the same or approximate location that it was originally presented.

Regardless of whether or not there is a suggestion in Gibbs to provide verification of the location of an area of interest, however, there is simply no suggestion to modify Gibbs to verify the location an area of interest based on the dimensional error between datum mark measurements. "To establish *prima facie* obviousness of a claimed invention, all the claim limitation must be taught to suggested in the prior art." M.P.E.P. §2143.03. In the present case, after determining that there was a suggestion in Gibbs to verify the location of an area of interest, the Examiner merely concluded that it would have been obvious to modify the teachings of Gibbs to perform such verification based on the dimensional error between datum mark measurements without providing any basis as to where a teaching or suggestion of such modification could be found in the prior art. In fact, there is no suggestion in Gibbs, because the datum marks are only disclosed therein as being used in a standard manner to relocate the area of interest on a later occasion, and there is no suggestion that these datum marks can be used in a different manner. Applicant emphasizes that such a suggestion can only be found in the specification of the claimed invention, which cannot be used as a basis for rejecting the claims over the prior art.

Thus, Applicant submits that independent claim 1, as well as the claims depending therefrom (claims 3, 5, and 7-8), are not obvious over Gibbs, and as such, respectfully request withdrawal of the §103 rejections of these claims.

Gibbs and Kamentsky

Claims 4, 6, and 9 stand rejected as being obvious over Gibbs in combination with U.S. Patent No. 5,587,833 (“Kamentsky”). Applicant respectfully traverses this rejection, since neither Gibbs nor Kamentsky, alone or in combination, disclose, teach, or suggest the combination of elements required by these claims. In particular, neither of these references disclose, teach, or suggest the verification of the location of an area of interest based on the dimensional error between datum mark measurements.

Thus, Applicant submits that independent claim 1, as well as the claims depending therefrom (claims 4, 6, and 9), are not obvious over the combination of Gibbs and Kamentsky, and as such, respectfully request withdrawal of the §103 rejections of these claims.

Gibbs and Ortyn

Claims 10-14, 20-21, and 23-25 stand rejected as being obvious over Gibbs in combination with U.S. Patent No. 5,499,097 (“Ortyn”). Applicant respectfully traverses this rejection, since neither Gibbs nor Ortyn, alone or in combination, disclose, teach, or suggest the combination of elements required by these claims.

As stated above, there is no suggestion in Gibbs that automated verification of the location of an area of interest is desired. Ortyn does not supplement this lack of teaching or suggestion in Gibbs. In particular, rather than using the datum marks on each specimen slide to verify the location of an area of interest, Ortyn uses the datum marks on a calibration slide (shown in Fig. 2) to

characterize the repeatability of stage movement. Thus, at the most, Ortyn suggests that Gibbs can be modified so that it can test the repeatability of its stage movement using datum marks on a calibration slide. There is no suggestion in Ortyn that Gibbs can be modified to verify the location of an area of interest on the actual biological specimen.

The significance of this difference is not trivial. By analyzing the datum marks on an actual biological specimen slide, it can be determined, on a slide-by-slide basis, whether the slides have been properly loaded and whether the relocations of the areas of interest are reliable. (See specification, page 9, lines 6-11). In contrast, by analyzing the datum marks on a calibration slide subsequent to the analysis of a batch of biological specimens, proper loading of such specimens cannot be determined, and the relocation of the areas of interest cannot be determined on a slide-by-slide basis. As a result, improper loading of specimens would likely go unnoticed and/or the entire batch of prior specimen data would have to be discarded if it is determined that the stage movement is not repeatable.

Thus, Applicant submits that independent claims 10, 14, and 20, as well as the claims depending therefrom (claims 11-13, 21, and 23-25), are not obvious over the combination of Gibbs and Ortyn, and as such, respectfully request withdrawal of the §103 rejections of these claims.

New Claims

Applicant submits that claims 23-25, which have been newly added, are supported by the specification, as originally filed, and are patentable over the cited prior art.

Conclusion

Based on the foregoing, all claims are now allowable and a Notice of Allowance is

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respectfully requested. If the Examiner has any questions or comments regarding this amendment, the Examiner is respectfully requested to contact the undersigned at (714) 830-0606.

Respectfully submitted,

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